

Item	Qty -141	Qty -141B	Qty -141F	Part Number	Description
1	X			D212-664-141	CROSSTUBE ASSEMBLY (205/212/412 HIGH FWD)
2		X		D212-664-141B	CROSSTUBE ASSEMBLY (214 HIGH FWD)
3			X	D212-664-141F	CROSSTUBE ASSEMBLY (205/212/412 HIGH FWD) (ANODIZED)
4	1	1	1	D6005-128	CROSSTUBE
5	2		2	D2893-1	SUPPORT
6	4	4	4	D3595-063-450	RUBBER CUSHION
7		2		D5017-1	SUPPORT
8	4	4	4	MS21920-25	CLAMP (OR MS21920-26)
9	A/R	A/R	A/R	PROSEAL 890 B-2	SEALANT, AMS-S-8802 CLASS B-2

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GENERAL NOTES:

1) MATERIAL: MANUFACTURED FROM D6005-128
FINISHED LENGTH = 126.514 ± 0.020

2) FINISH -141 & -141B: a) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
b) PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
c) MASK UNDERSIDE OF CROSSTUBE AS SHOWN (ZN C6-2 / C6-3, HATCHED AREA)
d) PAINT OUTSIDE PER DART QSI 005 4.2
e) REMOVE MASKING AND APPLY MATTE CLEAR COAT

FINISH -141F: a) ANODIZE PER MIL-A-8625, TYPE II, CLASS 1.
b) ALODINE (DO NOT ETCH) PER QSI 005 4.1.2
c) PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
d) MASK UNDERSIDE OF CROSSTUBE AS SHOWN (ZN C6-2 / C6-3, HATCHED AREA)
e) PAINT OUTSIDE PER DART QSI 005 4.2
f) REMOVE MASKING AND APPLY MATTE CLEAR COAT

***NOTE:** BETWEEN FINISHING OPERATIONS EXTREME CARE MUST BE TAKEN NOT TO
CONTAMINATE OR DAMAGE FINISHED SURFACES.

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED.
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
6) IDENTIFICATION: SCRIBE DART PART NUMBER "D212-664-XXX" AND BATCH NUMBER ON INSIDE OF CUFF USING VIBRATING STYLUS
7) WEIGHT: D212-664-141/-141B/-141F = 33.6 lbs
8) PART IS SYMMETRIC ABOUT CENTERLINE.
9) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.

MACHINING

10) RUN CUTTER OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.

BENDING

11) BEND PROGRESSIVELY WITH A MINIMUM OF 3 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 7.2% (BASED ON O.D.) IN LOWER HALF OF R35.5 BEND AND 6% (BASED ON O.D.) ON REMAINING TUBE.
12) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.

ASSEMBLY

13) TO INSTALL D2893-1 / D5017-1 SUPPORT: ABRADE MATING SURFACE OF SUPPORT AND CROSSTUBE WITH 180-GRIT SANDPAPER AND REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY A 0.04" TO 0.07" THICK LAYER OF PROSEAL 890 CLASS B-2 (OR AMS-S-8802 CLASS B-2) SEALANT TO MATING SURFACE OF SUPPORT.
14) INSTALL MS21920-25 CLAMPS (OR -26) WITH D3595-063-450 RUBBER CUSHIONS TO SECURE THE SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE ON TOP SIDE OF CROSSTUBE.
15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS.

RELEASED
2014-05-26
WD

E	ADD -141F, D5017-1 WAS D2893-1 (-141B), PROSEAL WAS MAGNOBOND, NOTE 2: ADD INSPECTION WINDOW, NOTE 11: ALLOW 7.2% CRUSH, NOTE 15: ADD 72HR CURE AND RETORQUE FOR PROSEAL, ADD SHEET 3, CLAMPS REVERSED TO PREVENT CHAFING (B7-2, B7-3), BEND HEIGHT TOL. NOW 0.25 WAS 0.13 (C1-3), INCORP. DEO D-1/-2/-3	CP	14.04.01
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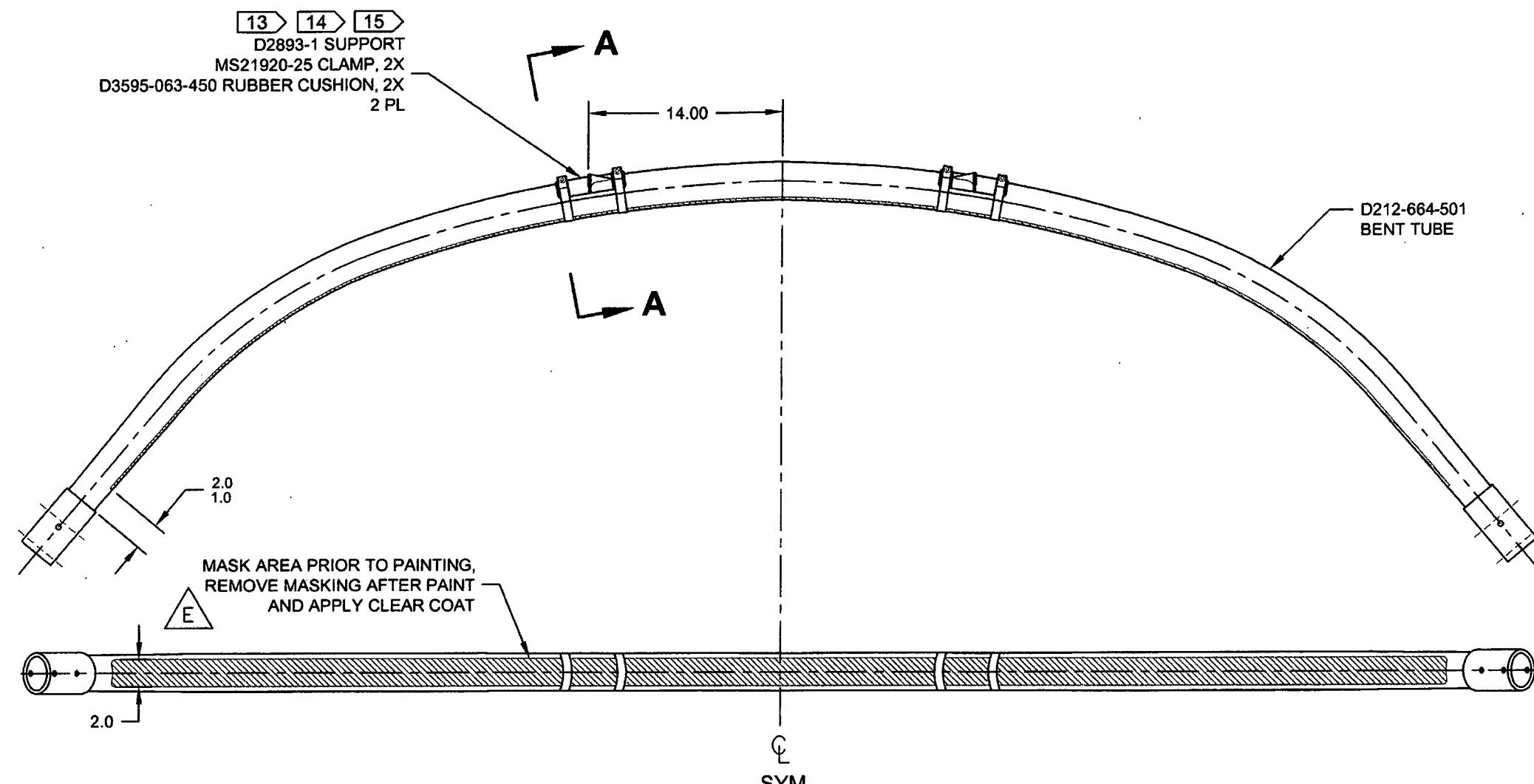
D	REFORMAT/REVISE GENERAL NOTES/PART LIST; REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENT STANDARDS; ADD -141B (ZN B4-2, D4-2); REMOVED REF & ADD TOLERANCES (ZN B4-3, C6-3, C8-3 & B6-3); RELOCATED FLAG #6 PER PAR 08-046 (ZN A5-3); MOVED TURNING DETAIL & UPDATED TOLERANCE TO SHEET 4	RF	09.09.30
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C	REMOVE -851 ABRASION STRIP; ADD MAGNOBOND 6398, CUSHION, REVERSE CLAMPS	PH	07.03.08
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B	ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES	PH	05.02.04
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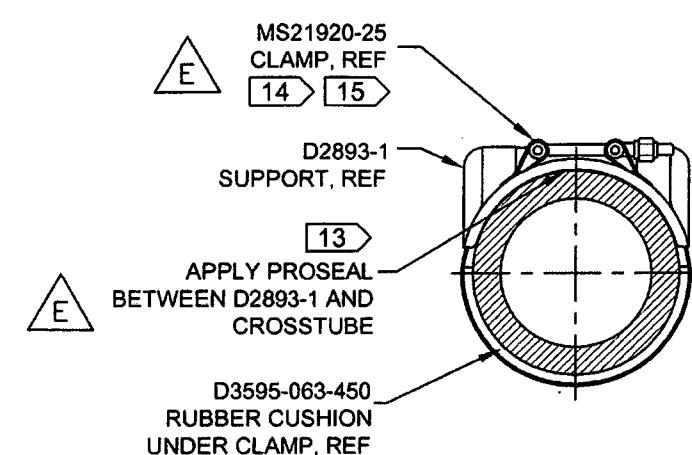
A	NEW ISSUE	CP	00.12.12
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REV.	DESCRIPTION	BY	DATE
DESIGN	99	DART AEROSPACE LTD	
DRAWN	99	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DW	DRAWING NO.	
MFG. APPR.		D212-664-141	REV. E
APPROVED		TITLE	SCALE
DE APPR.		XTUBE ASS'Y (205/212/412 HI FWD)	NTS
DATE	14.04.01	COPYRIGHT © 2000 BY DART AEROSPACE LTD	
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D212-664-141/141F
ASSEMBLY DETAIL

RELEASED
2014 -05- 26
1100

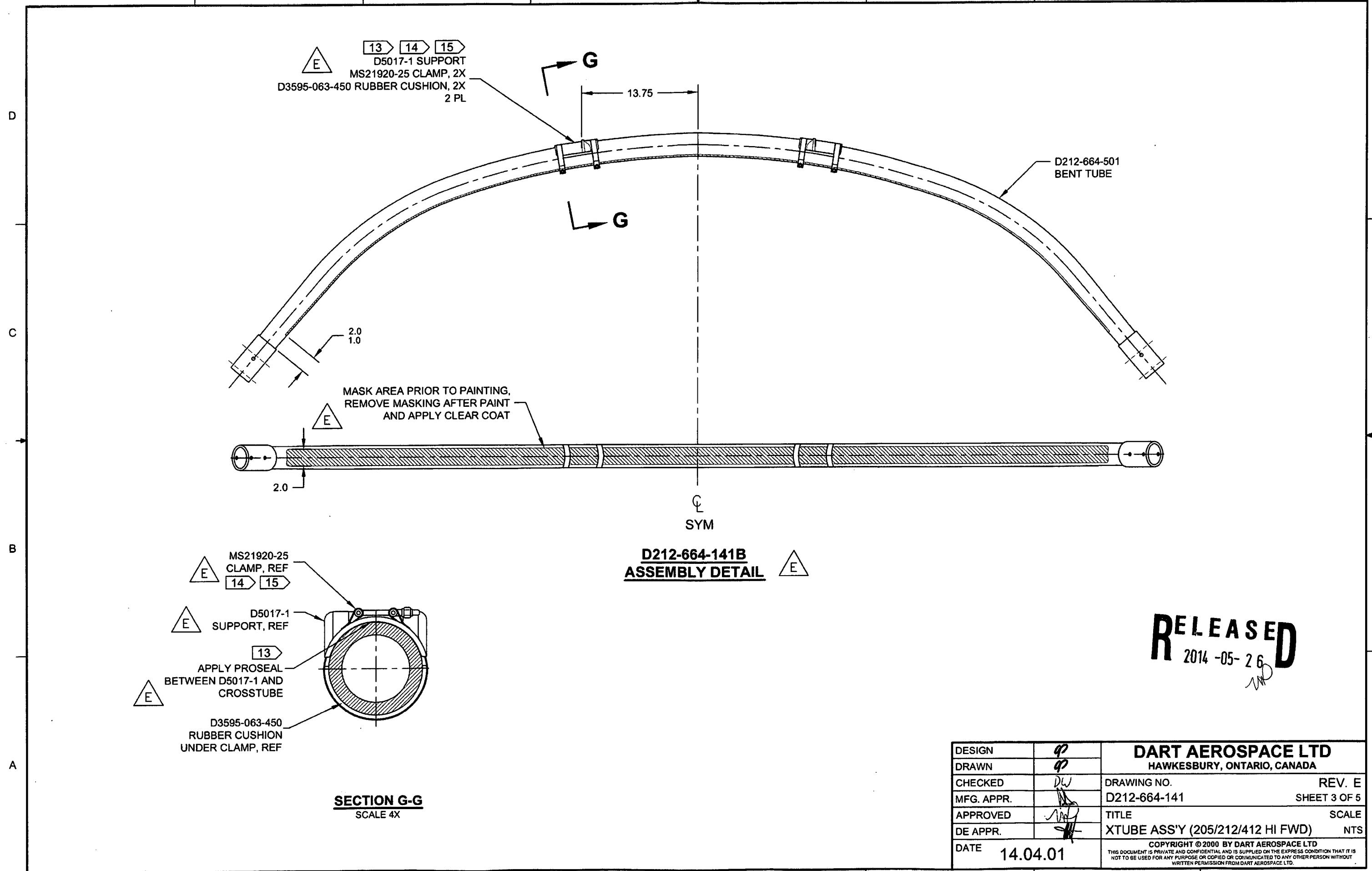


SECTION A-A

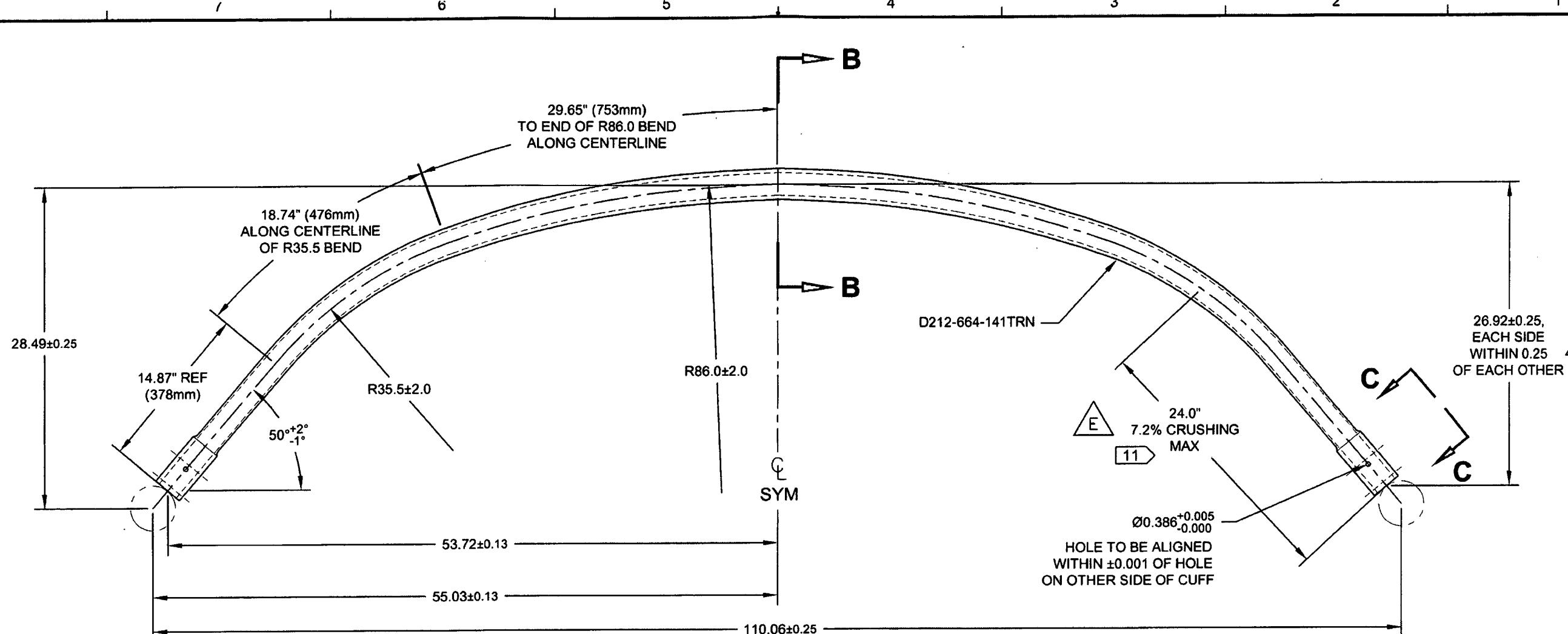
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DRAWN	97		
CHECKED	DW	DRAWING NO.	REV. E
MFG. APPR.	MM	D212-664-141	SHEET 2 OF 5
APPROVED	MM	TITLE	
DE APPR.	MM	XTUBE ASS'Y (205/212/412 HI FWD)	
DATE	14.04.01	NTS	

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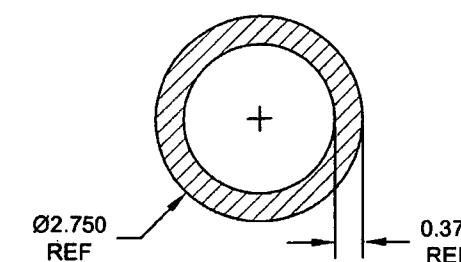
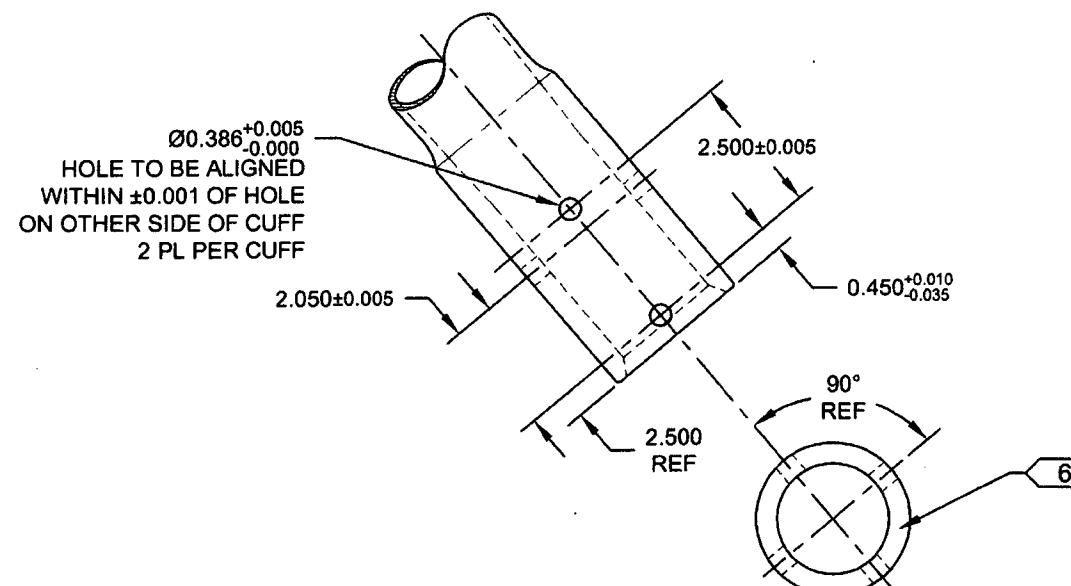
8 7 6 5 4 3 2 1



8 7 6 5 4 3 2 1



D212-664-501
BENDING AND DRILLING DETAIL (11)



SECTION B-B
SCALE 4X

VIEW C-C: CUFF DETAIL
SCALE 3X

DESIGN	9	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	9	
CHECKED	QW	
MFG. APPR.	N	
APPROVED	M	
DE APPR.	H	
DRAWING NO.	D212-664-141	REV. E
DATE	14.04.01	SHEET 4 OF 5
TITLE	XTUBE ASS'Y (205/212/412 HI FWD)	SCALE NTS
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